#### Commonwealth of Kentucky

Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

## STATE ORIGIN AIR QUALITY PERMIT

Permittee Name: Martin Marietta Materials, Inc.

Mailing Address: 800 N. Causeway Blvd., Suite 2A, Mandeville, Louisiana

70448

is authorized to construct and operate a limestone crushing operation

Source Name: Martin Marietta Materials, Inc. Three Rivers Quarry

Mailing Address: Same as above

Source Location: 830 Three Rivers Quarry Road, Smithland, Kentucky

**KYEIS ID #:** 21-139-00006

AI #: 2737 SIC Code: 1422

**Region Office:** Paducah Regional Office

4500 Clarks River Road Paducah, KY 42003-0823

County: Livingston

Permit Number: S-04-077 Log Number: 56648

**Permit Type:** Construction/Operating

Issuance Date: November 10, 2004 Expiration Date: November 10, 2014

John S. Lyons, Director

John S. Lyons, Director Division for Air Quality

**DEP7001 (6-97)** *Revised 01/15/01* 

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### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on October 4, 2004, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and receiving a permit for the planned activity from the Division, except as provided in this permit or in Regulation 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agency.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

## EXISTING PLANT #1 EQUIPMENT TO BE REMOVED

01	(15)	Conveyor and Transfer Points (36"x120' Stoker Conveyor # 11)
	(-)	Stockpile (4"x1 1/2") (Top Deck Material From Screen 14)
	(-)	Truck Loadout (4"x1 ½")
	(16)	Conveyor and Transfer Points (30"x150' Conveyor #8)
	(-)	Stockpile (510 Base) (Throughs From Screen 14)
	(-)	Truck Loadout (510 Base)
	(18)	Conveyor and Transfer Points (30"x150' Conveyor #10)
	(-)	Stockpile (Gabion) (Middle Deck Material From Screen 14)
	(-)	Truck Loadout (Gabion)
	(19)	Conveyor and Transfer Points (36"x190' Conveyor #6)
	(-)	Stockpile (Surge) (8"x1 ½") (Bottom Deck Material From Screen 14)
	(38)	Storage Bin (Top Deck Material From Screen 29)
	(39)	Storage Bin (Top Deck Material From Screen 29)
	(40)	Storage Bin (Top Deck Material From Screen 29)
	(33)	Storage Bin (Bottom Deck Material From Screen 29)
	(-)	Truck Loadout (Storage Bin 33 Material)
	(50)	Storage Bin (Throughs From Screen 47)
	(51)	Storage Bin (Throughs From Screen 47)
	(52)	Storage Bin (Throughs From Screen 48)
	(53)	Storage Bin (Throughs From Screen 48)
	(54)	Storage Bin (Throughs From Screen 49)
	(55)	Storage Bin (Throughs From Screen 49)

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01	(56)	Storage Bin (Bottom Deck Material From Screen 49)
	(57)	Conveyor and Transfer Points (48"x60' Conveyor # 28) (From Bin 56)
	(-)	Truck Loadout (Storage Bin 56 Material)
	(61)	Storage Bin (Top Deck Material From Screen 60)
	(62)	Storage Bin (Middle Deck Material From Screen 60)
	(63)	Storage Bin (Throughs Screen 60)
	(66)	Conveyor and Transfer Points (30"x150' Stoker Conveyor # 25)
	(-)	Stockpile (Final Product)
	(-)	Truck Loadout (Final Product)
02	(47)	Screen (6'x14' Seco Double Deck) (Maximum Rated Capacity- 450 tons/hour)
	(48)	Screen (6'x14' Seco Double Deck) (Maximum Rated Capacity- 450 tons/hour)
	(49)	Screen (6'x14' Seco Double Deck) (Maximum Rated Capacity- 450 tons/hour)
	(60)	Screen (5'x10' Pep Double Deck) (Maximum Rated Capacity- 1350 tons/hour)
03	(-)	Conveyor and Transfer Points (30"x12' Throughs from Screen 14 To Conveyor 16)
	(22)	Conveyor and Transfer Points (30"x215' Conveyor # 12 Reclaim From Surge Stockpile To Splitter Box)
	(26)	Conveyor and Transfer Points (36"x60' Conveyor # 13 From Tertiary Crusher 25 To Splitter Box)
	(101)	Conveyor and Transfer Points (36"x12' From Pan Feeder 42 To Tertiary Crusher 45)
	(36)	Conveyor and Transfer Points (30"x190' Conveyor # 18 From Splitter Box To Screen 47)

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03	(37)	Conveyor and Transfer Points (30"x190' Conveyor # 19 From Splitter Box To Screen 47)
	(58)	Conveyor and Transfer Points (24"x28' Conveyor # 21 From Storage Bins 50-55 To Conveyor 59)
	(59)	Conveyor and Transfer Points (30"x101' Conveyor # 22 From Conveyor 58 To Screen 60)
	(64)	Conveyor and Transfer Points (30"x70' Conveyor # 23 From Storage Bins 61-63 To Conveyor 65)
	(65)	Conveyor and Transfer Points (30"x154' Conveyor # 24 From Conveyor 64 To Conveyor 66)
04	(12)	Secondary Crusher (Universal Single Roll Impactor) (Maximum Rated Capacity- 500 tons/hour)
	(44)	Tertiary Crusher (4 1/4' Short Head Symons Cone) (Maximum Rated Capacity- 260 tons/hour)
	(45)	Tertiary Crusher (4 1/4' Short Head Symons Cone) (Maximum Rated Capacity- 260 tons/hour)
	(46)	Tertiary Crusher (4 1/4' Short Head Symons Cone) (Maximum Rated Capacity- 260 tons/hour)
EXIS	TING PLANT	#2 EQUIPMENT TO BE REMOVED
09	(67)	Receiving Hopper (Truck Dump)
	(69)	Primary Crusher (42"x50" Baxter Jaw) (Maximum Rated Capacity- 650 tons/hour)
	(76)	Conveyor and Transfer Points (30"x153' Stoker Conveyor # 3)
	(-)	Stockpile (2 ½" x ¾" Nisco 357) (Bottom Deck Material From Screen 71)
	(-)	Truck Loadout (2 ½" x ¾" Nisco 357)
	(80)	Storage Bin (Throughs From Screen 79)
	(81)	Storage Bin (Bottom Deck Material From Screen 79)

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09	(82)	Storage Bin (Middle Deck Material From Screen 79)
	(84)	Conveyor and Transfer Points (36"x120' Radial Stoker Conveyor # 8 From Conveyor 83 To Stockpile 3/4" to 0 – TVA Product)
	(-)	Stockpile (3/4" To 0 – TVA Product)
	(-)	Truck Loadout (3/4" To 0 – TVA Product)
10	(68)	Screen (51"x20' Simplicity Grizzly Feeder) (Maximum Rated Capacity- 800 tons/hour)
	(79)	Screen (8'x20' Diester Triple Deck) (Maximum Rated Capacity- 680 tons/hour)
11	(78)	Conveyor and Transfer Points (36"x170' Conveyor # 4 From Tertiary Crusher 73 To Screen 79)
	(82)	Conveyor and Transfer Points (36"x40" Conveyor #7 From Storage Bins 80-82 To Conveyor 84)
EXI	STING AG	LIME PLANT EQUIPMENT TO BE REMOVED
15	(85)	Receiving Hopper
	(-)	Stockpile (Lime)
	(-)	Truck Loadout (Lime)
16	(87)	Conveyor and Transfer Points (24"x80' Conveyor # 1)
	(88)	Dual Feed Auger
	(90)	Discharge Auger
	(91)	Conveyor and Transfer Points (24"x80' Conveyor # 2)
	(92)	Conveyor and Transfer Points (24"x100' Stoker Conveyor # 3)
17	(89)	Fines Mill (Grundler Pulverizer) (Maximum Rated Capacity- 150 tons/hour)
18	(93)	Pug Mill (Wet Process – No Emissions)

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## EXISTING BARGE LOADING OPERATION EQUIPMENT TO BE REMOVED

19	(94)	Receiving Hopper
	(96)	Conveyor and Transfer Points (42"x145' Conveyor # 2)
	(97)	Receiving Hopper
	(-)	Barge Loadout (Conveyor Dump)
	(-)	Barge Loadout (Truck Dump)
20	(98)	Conveyor and Transfer Points (36"x145' Conveyor # 1)
21	(99)	Screen (8'x20' Diester Double Deck) (Maximum Rated Capacity- 100 tons/hour)
27	(102)	Receiving Hopper
EXIS	STING PLA	NT #1 EQUIPMENT REMAINING AT THE PLANT
29	(1)	Receiving Hopper (Truck Dump)
	(2)	Grizzly Screen (60"x20" Telesmith Feeder) (Maximum Rated Capacity- 625 tons/hour)
	(4)	Grizzly Screen (6'x20' Allis Chalmers Feeder) (Maximum Rated Capacity- 125 tons/hour)
	(-)	Stockpile (C-Stone)
	(-)	Truck Loadout (C-Stone)
	(5)	Grizzly Screen (42"x14' Pioneer Apron Feeder) (Maximum Rated Capacity- 75 tons/hour)
	(6)	Conveyor and Transfer Points (42"x28' From Screen 5 To Conveyor 7)
	(3)	Primary Crusher (40"x50"Baxter Jaw) (Maximum Rated Capacity- 500 tons/hour)
	(7)	Conveyor and Transfer Points (60"x280' From Conveyor 6 To Screen 8)

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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29	(8)	Grizzly Screen (62"x15' Simplicity Feeder) (Maximum Rated Capacity- 575 tons/hour)
	(9)	Conveyor and Transfer Points (48"x250' From Screen 8 To Conveyor 11)
	(11)	Conveyor and Transfer Points (48"x178' From Conveyor 9 To Rip Rap Stockpile)
	(-)	Stockpile (Man Sized Rip Rap)
	(-)	Truck Loadout (Man Sized Rip Rap)
	(12)	Conveyor and Transfer Points (48"x132' From Screen 8 To Conveyor 13)
08	(-)	Haul Road and Yard Area (Unpaved)
ADD	OITIONS TO	THE EXISTING EQUIPMENT REMAINING AT THE PLANT
31	(14)	Conveyor and Transfer Points (48"x100' Radial Stacker From Conveyor 13 To Surge Stockpile)
	(-)	Stockpile (Waste)
	(-)	Truck Loadout (Waste)
	(-)	Stockpile (Surge)
	(-)	Truck Loadout (Surge)
CON	STRUCTION	N OF A NEW PLANT
32	(6)	Conveyor and Transfer Points (54"x325' Conveyor # 2b From Conveyor 5 To Surge Stockpile)
	(-)	Stockpile (Surge)
	(7)	Feeder (60"x72" Under Surge Stockpile) (Underground – No Emissions)
	(8)	Feeder (60"x72" Under Surge Stockpile) (Underground – No

**Emissions**)

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32	(9)	Feeder (60"x72" Under Surge Stockpile) (Underground – No Emissions)
	(18)	Conveyor and Transfer Points (36"x200' Conveyor # 9a From Conveyor 8 To DGA Stockpile)
	(-)	Stockpile (DGA)
	(-)	Truck Loadout (DGA)
	(-)	Conveyor and Transfer Points (Feeder Under DGA Stockpile) (Underground – No Emissions)
	(-)	Conveyor and Transfer Points (Feeder Under DGA Stockpile) (Underground – No Emissions)
	(19)	Conveyor and Transfer Points (36"x200' Conveyor # 9b From Conveyor 8 To 610's Stockpile)
	(-)	Stockpile (610's)
	(-)	Truck Loadout (610's)
	(-)	Conveyor and Transfer Points (Feeder Under 610's Stockpile) (Underground – No Emissions)
	(-)	Conveyor and Transfer Points (Feeder Under 610's Stockpile) (Underground – No Emissions)
	(-)	Conveyor and Transfer Points (Feeder Under 610's Stockpile) (Underground – No Emissions)
	(22)	Conveyor and Transfer Points (42"x330' From Conveyor 11 To Barge Loadout)
	(-)	Barge Loadout (No.1)
	(39)	Conveyor and Transfer Points (24"x350' Conveyor # 18 From Conveyor 17 To – ½"-0" Stockpile)
	(-)	Stockpile (- 1/4"-0")
	(-)	Truck Loadout (- 1/4"-0")

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

	CCLITIC	or solution (continued)
32	(40)	Conveyor and Transfer Points (30" Belt Feeder Under – ¼"-0" Stockpile) (Underground – No Emissions)
	(41)	Conveyor and Transfer Points (30" Belt Feeder Under – ¼"-0" Stockpile) (Underground – No Emissions)
	(42)	Conveyor and Transfer Points (24"x350' Conveyor # 19 From Screens 35 and 37 To ½"–¼" Stockpile)
	(-)	Stockpile (½"– ¼")
	(-)	Truck Loadout (½"- ¼")
	(43)	Slide Gate (16"x22" Under $\frac{1}{2}$ " – $\frac{1}{4}$ " Stockpile) (Underground – No Emissions)
	(44)	Slide Gate (16"x22" Under $\frac{1}{2}$ " – $\frac{1}{4}$ " Stockpile) (Underground – No Emissions)
	(45)	Slide Gate (16"x22" Under $\frac{1}{2}$ " – $\frac{1}{4}$ " Stockpile) (Underground – No Emissions)
	(47)	Conveyor and Transfer Points (24"x350' Conveyor #21 From Conveyor 20 To 1 ½"– 1 1/8" Stockpile)
	(-)	Stockpile (1 ½"– 1 1/8")
	(-)	Truck Loadout (1 ½"- 1 1/8")
	(48)	Slide Gate (20"x28" Under 1 ½"– 1 1/8" Stockpile) (Underground – No Emissions)
	(49)	Slide Gate (20"x28" Under 1 ½"– 1 1/8" Stockpile) (Underground – No Emissions)
	(50)	Slide Gate (20"x28" Under 1 ½"– 1 1/8" Stockpile) (Underground – No Emissions)
	(63)	Conveyor and Transfer Points (24"x350' Conveyor # 26 From Conveyor 25 To 1 1/8" – 3/4" Stockpile)
	(-)	Stockpile (1 1/8" – 3/4")

Truck Loadout  $(1 \frac{1}{8}" - \frac{3}{4}")$ 

(-)

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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32	(64)	Slide Gate (20"x28" Under 1 $1/8$ " – $3/4$ " Stockpile) (Underground – No Emissions)
	(65)	Slide Gate (20"x28" Under 1 $1/8$ " – $3/4$ " Stockpile) (Underground – No Emissions)
	(66)	Slide Gate (20"x28" Under 1 $1/8$ " – $3/4$ " Stockpile) (Underground – No Emissions)
	(67)	Conveyor and Transfer Points (24"x350' Conveyor # 27 From Screens 55 and 60 To 3/4" – 5/8" Stockpile)
	(-)	Stockpile (3/4" – 5/8")
	(-)	Truck Loadout (¾" – 5/8")
	(68)	Slide Gate (16"x22" Under 3/4" – 5/8" Stockpile) (Underground – No Emissions)
	(69)	Slide Gate (16"x22" Under 3/4" – 5/8" Stockpile) (Underground – No Emissions)
	(70)	Slide Gate (16"x22" Under 3/4" – 5/8" Stockpile) (Underground – No Emissions)
	(76)	Conveyor and Transfer Points (24"x350' Conveyor #31 From Conveyor 30 To 5/8" – 3/8" Stockpile)
	(-)	Stockpile (5/8" – 3/8")
	(-)	Truck Loadout (5/8" – 3/8")
	(77)	Slide Gate (16"x22" Under $5/8$ " – $3/8$ " Stockpile) (Underground – No Emissions)
	(78)	Slide Gate (16"x22" Under $5/8$ " $-3/8$ " Stockpile) (Underground – No Emissions)
	(79)	Slide Gate (16"x22" Under 5/8" – 3/8" Stockpile) (Underground – No Emissions)
	(81)	Conveyor and Transfer Points (24"x350' Conveyor #33 From Conveyor 32 To 1/4" – 3/32" Stockpile)

(-)

**Stockpile** (1/4" – 3/32")

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32	(-)	Truck Loadout (1/4" - 3/32")
	(82)	Conveyor and Transfer Points (30" Belt Feeder Under – ¼" – 3/32" Stockpile) (Underground – No Emissions)
	(83)	Conveyor and Transfer Points (30" Belt Feeder Under – ¼" – 3/32" Stockpile) (Underground – No Emissions)
	(84)	Conveyor and Transfer Points (24"x350' Conveyor # 34 From Screens 73 and 74 To 3/8" – 1/4" Stockpile)
	(-)	Stockpile (3/8" – 1/4")
	(-)	Truck Loadout (3/8" – 1/4")
	(85)	Conveyor and Transfer Points (30" Belt Feeder Under – 3/8" – ½" Stockpile) (Underground – No Emissions)
	(86)	Conveyor and Transfer Points (30" Belt Feeder Under – 3/8" – 1/4" Stockpile) (Underground – No Emissions)
	(90)	Conveyor and Transfer Points (24"x350' Conveyor # 37 From Sand Screw To 3/32" – 0" Stockpile)
	(-)	Stockpile (3/32" – 0")
	(-)	Truck Loadout (3/32" – 0")
	(91)	Conveyor and Transfer Points (30" Belt Feeder Under – 3/32" – 0" Stockpile) (Underground – No Emissions)
	(92)	Conveyor and Transfer Points (30" Belt Feeder Under – 3/32" – 0" Stockpile) (Underground – No Emissions)
	(101)	Conveyor and Transfer Points (48"x125' Conveyor # 44 From Conveyor 43 To Barge Loadout No. 2 or Local Stockpile)
	(-)	Barge Loadout (No. 2)
	(-)	Stockpile (Local 57's, 67's, or 78's)
	(-)	Truck Loadout (Local 57's, 67's, or 78's)
	(102)	Conveyor and Transfer Points (36"x500' Conveyor # 45 From Screen 14 To Gabion Stockpile)

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 32 (-) Stockpile (Gabion)
  - (-) Truck Loadout (Gabion)
  - (-) Stockpile (Fine Recovery)
  - (-) Truck Loadout (Fine Recovery)

#### **Applicable Regulations:**

State Regulation 401 KAR 63:010, Fugitive emissions, applies to each of the affected facilities listed above.

#### 1. **Operating Limitations:**

N/A

#### 2. <u>Emission Limitations</u>:

The materials processed at each affected facility listed above shall be controlled with either wet suppression and/or enclosures so as to comply with the requirements specified in State Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.

#### **Compliance Demonstration Method:**

See Section C, General Condition F.1.

#### 3. <u>Testing Requirements</u>:

See Section C, General Condition G.3.

#### 4. Monitoring Requirements:

See Section C. General Condition F.1.

#### 5. Recordkeeping Requirements:

See Section C, General Conditions B.1., B.2., and F.1.

#### 6. Reporting Requirements:

See Section C, General Conditions C.1, C.2, C.3., F.2., and G.2.

#### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE

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## REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## EXISTING PLANT #1 EQUIPMENT TO BE REMOVED

05	(14)	Screen (8'x20' Seco Triple Deck) (Maximum Rated Capacity- 575 tons/hour)
	(28)	Screen (6'x14' Seco Double Deck) (Maximum Rated Capacity- 300 tons/hour)
	(29)	Screen (6'x14' Seco Double Deck) (Maximum Rated Capacity- 300 tons/hour)
06	(17)	Conveyor and Transfer Points (30"x154' Conveyor # 9 From Middle Deck Of Screen 14 To Conveyor 18)
	(27)	Conveyor and Transfer Points (36"x170' Conveyor # 14 From Splitter Box To Screen 28)
	(30)	Conveyor and Transfer Points (36"x73' Conveyor # 15 From Top Deck Of Screen 29 To Storage Bin 33)
	(31)	Conveyor and Transfer Points (36"x82' Conveyor # 27 From Bottom Deck Of Screen 29 To Storage Bin 33)
	(32)	Conveyor and Transfer Points (36"x22' Conveyor # 26 Throughs From Screens 28 and 29 To Conveyor 34)
	(34)	Conveyor and Transfer Points (30"x63' Conveyor # 16 From Conveyor 32 To Conveyor 35)
	(35)	Conveyor and Transfer Points (30"x140' Conveyor # 17 From Conveyor 34 To Conveyors 36 and 37)
07	(25)	Tertiary Crusher (7' Symons Standard Cone) (Maximum Rated Capacity- 1500 tons/hour)
22	(70)	Conveyor and Transfer Points (42"x545' Conveyor # 1 From Conveyor 100 To Screen 71)
	(75)	Conveyor and Transfer Points (42"x66' Conveyor # 2 From Tertiary Crusher 73 and Throughs From Screen 71 To Conveyor 78)
	(77)	Conveyor and Transfer Points (36"x146' Conveyor # 6 Throughs From Screen 71 To Storage Bin 81)
	(100)	Conveyor and Transfer Points (30"x134' Conveyor # 5 From Screen 79 To Tertiary Crusher 73)
SEC	TION R	- EMISSION POINTS. EMISSIONS UNITS. APPLICABLE

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## REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 23 (71) Screen (8'x20' Triple Deck) (Maximum Rated Capacity- 900 tons/hour)
- 24 (73) Secondary Crusher (Universal Impact Master II Model 150/150) (Maximum Rated Capacity- 650 tons/hour)
- 26 (-) Conveyor and Transfer Points
  - (-) Conveyor and Transfer Points
- 28 (104) Tertiary Crusher (HP 300 Cone) (Maximum Rated Capacity- 200 tons/hour)

#### ADDITIONS TO THE EXISTING EQUIPMENT REMAINING AT THE PLANT

30 (13) Conveyor and Transfer Points (48"x200' Conveyor # 6 From Conveyor 12 To Conveyor 14)

#### **CONSTRUCTION OF A NEW PLANT**

- 33 (1) Primary Crusher (Gyratory 5474) (Maximum Rated Capacity- 2500 tons/hour)
  - (2) Storage Bin (Surge Bin)
  - (4) Conveyor and Transfer Points (60"x100' Conveyor # 1 From Storage Bin 2 To Conveyor 5)
  - (5) Conveyor and Transfer Points (54"x800' Conveyor # 2a From Conveyor 1 To Conveyor 2b)
  - (10) Conveyor and Transfer Points (48"x290' Tunnel Conveyor # 3 From Surge Stockpile To Conveyors 4 and 5)
  - (11) Conveyor and Transfer Points (42"x325' Conveyor # 4 From Conveyor 10 To Screen 12)

#### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE

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## REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

33	(12)	Screen (8'x20' Triple Deck) (Maximum Rated Capacity- 1300 tons/hour)
	(13)	Conveyor and Transfer Points (42"x325' Conveyor # 5 From Conveyor 10 To Screen 14)
	(14)	Screen (8'x20' Triple Deck) (Maximum Rated Capacity- 1300 tons/hour)
	(15)	Conveyor and Transfer Points (30"x20' Conveyor # 6 From Screen 12 To Conveyor 17)
	(16)	Conveyor and Transfer Points (30"x20' Conveyor # 7 From Screen 14 To Conveyor 17)
	(17)	Conveyor and Transfer Points (36"x470' Conveyor # 8 From Conveyors 15 and 16 To Conveyors 9a and 9b)
	(20)	Conveyor and Transfer Points (42"x630' Tunnel Conveyor # 10 From 610's and DGA Stockpiles To Conveyor 21)
	(21)	Conveyor and Transfer Points (42"x420' Conveyor # 11 From Conveyor 10 To Conveyor 22)
	(23)	Storage Bin
	(25)	Secondary Crusher (Canica 80 VSI) (Maximum Rated Capacity- 1300 tons/hour)
	(26)	Conveyor and Transfer Points (30"x340' Conveyor # 13 From Crusher 25 To Conveyors 11 and 13)
	(27)	Storage Bin
	(29)	Secondary Crusher (Canica 155 VSI) (Maximum Rated Capacity- 1300 tons/hour)
	(30)	Storage Bin
	(32)	Secondary Crusher (7' Standard Cone) (Maximum Rated Capacity- 1300 tons/hour)
	(33)	Conveyor and Transfer Points (48"x220' Conveyor # 14 From Crushers 29 and 32 To Conveyors 34 and 36)

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## REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

33	(34)	Conveyor and Transfer Points (36"x324' Conveyor # 15 From Conveyor 14 To Screen 35)
	(35)	Screen (8'x24' Four Deck) (Maximum Rated Capacity- 1000 tons/hour)
	(36)	Conveyor and Transfer Points (36"x324' Conveyor # 16 From Conveyor 33 To Screen 37)
	(37)	Screen (8'x24' Four Deck) (Maximum Rated Capacity- 1000 tons/hour)
	(38)	Conveyor and Transfer Points (24"x35' Conveyor # 17 From Screen 37 To Conveyor 39)
	(46)	Conveyor and Transfer Points (24"x35' Conveyor # 20 From Screens 35 and 37 To Conveyor 47)
	(51)	Storage Bin
	(53)	Tertiary Crusher (Canica 105 VSI) (Maximum Rated Capacity- 1000 tons/hour)
	(54)	Conveyor and Transfer Points (30"x460' Conveyor # 22 From Screens 35 and 37 To Screen 55)
	(55)	Fines Screen (8'x20' Four Deck) (Maximum Rated Capacity- 800 tons/hour)
	(56)	Storage Bin
	(58)	Tertiary Crusher (7' Short Head Cone) (Maximum Rated Capacity- 1000 tons/hour)
	(59)	Conveyor and Transfer Points (30"x460' Conveyor # 23 From Screens 35 and 37 To Screen 60)
	(60)	Fines Screen (8'x20' Four Deck) (Maximum Rated Capacity- 800 tons/hour)
	(61)	Conveyor and Transfer Points (30"x420' Conveyor # 24 From Screens 55 and 60 To Storage Bins 51 or 56)
	(62)	Conveyor and Transfer Points (24"x35' Conveyor # 25 From Screens 55 and 60 To Conveyor 63)

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## REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

33	(71)	Conveyor and Transfer Points (30"x365' Conveyor # 28 From Screen 60 To Screen 73)
	(72)	Conveyor and Transfer Points (30"x365' Conveyor # 29 From Screen 55 To Screen 74)
	(73)	Fines Screen (8'x20' Triple Deck) (Maximum Rated Capacity- 300 tons/hour)
	(74)	Fines Screen (8'x20' Triple Deck) (Maximum Rated Capacity- 300 tons/hour)
	(75)	Conveyor and Transfer Points (24"x35' Conveyor #30 From Screens 73 and 74 To Conveyor 76)
	(80)	Conveyor and Transfer Points (24"x35' Conveyor #32 From Screens 73 and 74 To Conveyor 81)
	(87)	Conveyor and Transfer Points (30"x505' Conveyor # 35 From Screens 55, 60, 73, and 74 To Sand Screw 88)
	(88)	Conveyor and Transfer Points (66"x36' DBL Sand Screw From Conveyor 87 and Cyclone To Conveyor 90 or Fine Recovery Stockpile)
	(89)	Conveyor and Transfer Points (30"x226' Conveyor # 36 From ½"-0" Stockpile To Conveyor 21)
	(93)	Conveyor and Transfer Points (48"x1575' Blending Tunnel Conveyor # 38 From Stockpiles To Conveyors 94, 96, and 98)
	(94)	Conveyor and Transfer Points (36"x120' Conveyor #39 From Conveyor 93 To Screen 95)
	(95)	Wash Screen (8'x20' Triple Deck) (Wet Process – No Emissions) (Maximum Rated Capacity- 1000 tons/hour)
	(96)	Conveyor and Transfer Points (36"x120' Conveyor # 40 From Conveyor 93 To Screen 97)
	(97)	Wash Screen (8'x20' Triple Deck) (Wet Process – No Emissions) (Maximum Rated Capacity- 1000 tons/hour)
	(98)	Conveyor and Transfer Points (48"x150' Conveyor # 41 From Conveyor 93 To Conveyor 100)

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### REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 33 (99) Conveyor and Transfer Points (48"x160' Conveyor # 42 From Screens 95 and 97 To Conveyor 100) (Wet Process No Emissions)
  - (100) Conveyor and Transfer Points (48"x355' Conveyor # 43 From Conveyors 98 and 99 To Conveyor 101)
  - (-) Cyclone (Wet Process No Emissions) (Maximum Rated Capacity- 1000 tons/hour)

#### **Applicable Regulations:**

State Regulation 401 KAR 60:670, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 3 of 401 KAR 60:670), applies to each of the affected facilities listed above.

#### 1. **Operating Limitations:**

N/A

#### 2. <u>Emission Limitations</u>:

- a) Fugitive emissions from the primary crusher, emission point 33 (1); the four secondary crushers, emission points 24 (73) and 33 (25), (29), and (32); and the four tertiary crushers, emission points 07 (25), 28 (104), and 33 (53) and (58), shall not exhibit greater than fifteen percent (15%) opacity, each, as specified in State Regulation 401 KAR 60:670 (40 CFR 60.672(c)).
- b) Fugitive emissions from the fifteen screens, emission points 05 (14), (28), and (29), 23 (71), and 33 (12), (14), (35), (37), (55), (60), (73), (74), (95), (97), and (-); the six storage bins, emission points 33 (2), (23), (27), (30), (51), and (56); and the fifty one conveyors and transfer points, emission points 06 (17), (27), (30), (31), (32), (34), and (35), 22 (70), (75), (77), and (100), 26 (-), (-), (-), (-), (-), (-), and (-), 30 (13), 33 (4), (5), (10), (11), (13), (15), (16), (17), (20), (21), (26), (33), (34), (36), (38), (46), (54), (59), (61), (62), (71), (72), (75), (80), (87), (88), (89), (93), (94), (96), (98), (99), and (100), shall not exhibit greater than ten percent (10%) opacity, each, as specified in State Regulation 401 KAR 60:670 (40 CFR 60.672(b)).

#### **Compliance Demonstration Method:**

In determining compliance with the opacity standards as listed above, the owner or operator shall use Method 9 and the procedures as described in 40 CFR 60.11 and 40 CFR 60.675(c), except for wet processes, which are exempt from Method 9, as specified in 40 CFR 60.675 (h)(1) and (2).

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## 3. <u>Testing Requirements</u>:

See Section C, General Condition G.3.

### 4. **Monitoring Requirements:**

See Section C, General Condition F.1.

### 5. Recordkeeping Requirements:

See Section C, General Conditions B.1., B.2., and F.1.

## 6. Reporting Requirements:

See Section C, General Conditions C.1., C.2., C.3., F.2., and G.2.

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#### A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of Regulation 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- 2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- 3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11]
- 4. Pursuant to materials incorporated by reference by 401 KAR 52:040, the permit contained herein may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4 and 5]
- 5. The permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
- 6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
- 7. The permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. Source shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
- 8. All previously issued permits to this source at this location are hereby null and void.

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## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

## B. Recordkeeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:040, Section 1b, IV. 2) and 401 KAR 52:040 Section 3(1)(f)]

2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 52:040, Section 21.

## C. Reporting Requirements

- 1. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Paducah Regional Office concerning startups, shutdowns, or malfunctions as follows:
  - 1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
  - b. In accordance with the provisions of Material incorporated by reference by 401 KAR 52:040, Section 1b, V. 3), the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Division for Air Quality's Paducah Regional Office.
- 2. The permittee shall furnish information requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
- 3. Summary reports of monitoring required by this permit shall be submitted to the Division's Paducah Regional Office at least every six (6) months during the life of this permit. The summary reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21. All deviations from permit requirements shall be clearly identified in the reports.

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## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

## D. <u>Inspections</u>

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
- b. To access and copy any records required by the permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit;
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

## E. Emergencies/Enforcement Provisions

- 1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
- 2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

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## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

## F. Compliance

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

- a. Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.
- b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be normal or abnormal. If the operations, controls and/or emissions appear to be abnormal, the permittee must then comply with the requirements of Section C General Conditions, paragraph C.1.b., of this permit.
- c. A log of the monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program (spread sheets), calculations or performance tests as may be specified by the Division.
- 2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall annually complete and return a Compliance Certification Form (DEP 7007CC) to the Division's Paducah Regional Office in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period; and
  - e. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Paducah Regional Office

4500 Clarks River Road
Paducah, KY 42003-0823

Division for Air Quality
Office Central Files
803 Schenkel Lane
Frankfort, KY 40601

- 3. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all applicable requirements for:
  - a. Applicable requirements included and specifically identified in the permit; or
  - b. Non-applicable requirements expressly identified in this permit.

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### G. New Construction Requirements:

1. Pursuant to 401 KAR 52:040, Section 12(3), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon a written request, the cabinet may extend these time periods if the source shows good cause.

- 2. Pursuant to 401 KAR 52:040, Section 12(4)(a) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's Paducah Regional Office, with a copy to the Division's Frankfort Central Office, the following:
  - a. Date when construction commenced, (See General Condition G.1).
  - b. Start-up date of each of the affected facilities listed on this permit.
  - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
  - d. Summary reports, as referenced in Section C, C.3., of any monitoring required by this permit, for emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
  - e. The annual compliance certification, as referenced in Section C, F.2., for an emissions unit that was still under construction or which had not commenced operation at the end of the 12-month period covered by the compliance certification, shall indicate that the unit was under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- 3. a. Pursuant to 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and compliance demonstration of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.
  - b. Pursuant to 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
- 4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4)(b).